

**NATURAL RESOURCE CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
NEW JERSEY**

BRUSH MANAGEMENT

(Acre)
CODE 314

DEFINITION

Removal, reduction, or manipulation of non-herbaceous plants.

PURPOSES

This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

- Restore natural plant community balance.
- Create the desired plant community.
- Reduce competition for space, moisture, and sunlight between desired and unwanted plants.
- Manage noxious woody plants.
- Restore desired vegetative cover to protect soils, control erosion, reduce sediment, improve water quality and enhance stream flow.
- Maintain or enhance wildlife habitat including that associated with threatened and endangered species.
- Improve forage accessibility, quality and quantity for livestock.
- Protect life and property from wildfire hazards.
- Improve visibility and access for handling livestock.

CONDITIONS WHERE THIS PRACTICE APPLIES

On rangeland, native or naturalized pasture, pasture and hay lands where removal or reduction of excessive woody (non-herbaceous) plants is desired.

CRITERIA

General Criteria Applicable For All The Purposes Stated Above.

Brush management will be designed to achieve the desired plant community in woody plant density, canopy cover, or height.

Brush Management will be applied in a manner to achieve the desired control of the target woody species and protection of desired species. This will be accomplished by mechanical, chemical, biological, prescribed burning or a combination of these methods.

Prescribed Grazing shall be applied to ensure desired response from treatments.

Mechanical Control

There are many mechanical devices and techniques for controlling brush. Mowers, heavy disks, bulldozers, blades and power saws are some of the equipment that can be used. Cut shrubby growth as close to the surface as possible. Chaining and cabling may be effective for control or eradication of woody plants. This method is best used when plant stems are 2 to 6 inches in diameter and have lateral root systems.

Conservation practices are review periodically and updated as needed. The most current version of this standard can be obtained on our website at:
<http://www.nj.nrcs.usda.gov/fotg/practices.html>

The best time for mechanical control of brush is late July or early August. This is the plant growth stage when root reserves are low and leaf growth is at its maximum. Early spring is next best. It may be necessary to apply such treatment during both of these periods if the invasion is heavy.

Large woody plants may be destroyed by girdling. Best results are obtained in spring or late summer but satisfactory results can be obtained all year. Cut a band completely around the shrub from 1 to 6 inches wide through the bark and cambium layers. Girdle as close to the ground surface as practical.

Biological Control

Grazing of brush by goats or sheep may provide satisfactory control and be very economical. Be sure that species to be grazed pose no toxicity hazard to grazing livestock.

Chemical Control

Apply only herbicides labeled for the species to be controlled. Advise the cooperator to follow instructions on the label precisely. Herbicides to use must be chosen from the current "Pest Management Recommendations for Field Crops" by the Cooperative Extension Service.

Use foliar sprays for widespread general control. Apply when brush is actively growing. Applications made between May 1 and July 15 are the most effective; between July 15 and October 1 are next best.

Use basal sprays or cut-stump sprays for selective treatment according to label. Application can be done anytime during the growing season. Foliar spray is preferable to either of these methods.

Prescribed Burning

Consult NJ Forest Fire Service and NJ Bureau of Forestry for guidance and permitting.

Manage brush according to brush species, size, and distribution pattern for wildlife habitat, natural aesthetics, and recreation.

Additional Criteria For Improving Wildlife Habitat.

Brush Management will be planned and applied in a manner to meet the habitat requirements of the wildlife of concern.

Brush management will be planned in a manner that it will not adversely affect threatened or endangered species or their habitats.

Additional Criteria For Reducing Wildfire Hazards.

Control undesirable woody plants in a manner that creates the desired plant community which does not provide wildfire hazard conditions.

CONSIDERATIONS

Timing and sequence of brush management in a pasture and/or the entire operating unit should be planned to ensure needed grazing management.

Consider soil erosion potential and difficulty of vegetation establishment when choosing a method of control that causes soil disturbance.

PLANS AND SPECIFICATIONS

Plans and specifications will be prepared for each pasture, field, or management unit where Brush Management will be applied.

Plans and specifications will be based on the practice standard and may include narratives, maps, drawings, job sheets, or similar documents. These documents will contain the following data as a minimum:

Brush canopy and/or species count, transect line locations and percent canopy and/or species numbers per acre of the target plant(s).

As needed, maps or drawings showing areas to be treated and areas to be left undisturbed should be prepared.

For mechanical treatment methods, plans and specifications will include types of equipment and any modifications necessary to enable the

equipment to adequately complete the job. Also included should be:

- Dates of treatment
- Operating instructions
- Techniques or procedures to be followed

For chemical treatment methods, plans and specifications will include:

- Herbicide name
- Rate of application or spray volumes
- Acceptable dates of application
- Mixing instructions (if applicable)
- Any special application techniques, timing considerations, or other factors that must be considered to ensure the safest, most effective application of the herbicide
- Reference to label instructions

For biological treatment methods, plans and specifications will include:

- Kind of biological agent or grazing animal to be used
- Timing, duration, and intensity of grazing or browsing
- Desired degree of grazing or browsing use for effective control of target species
- Maximum allowable degree of use on desirable non-target species
- Special precautions or requirements when using insects or plants as control agents

OPERATION AND MAINTENANCE

Operation: Brush Management practices shall be applied using approved materials and procedures. Operations will comply with all local, state, and federal laws and ordinances.

Success of the practice shall be determined by evaluating regrowth or reoccurrence of target species after sufficient time has passed to monitor the situation and gather reliable data. Evaluation periods will depend on the methods and materials used.

Maintenance: Following initial application, some regrowth, resprouting, or reoccurrence of brush should be expected. Spot treatment of individual plants or areas needing retreatment should be done as needed.

References

Pest Management Recommendations for Field Crops. Bulletin 237. 2000. Cooperative Extension Services. Rutgers University. New Jersey.